U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 2



September 25, 2018

BY ELECTRONIC MAIL

Robert Law, Ph.D. de maximis, inc. 186 Center Street, Suite 290 Clinton, New Jersey 08809

Re: Draft 2012 Benthic Invertebrate Community Reference Data Report for the Lower Passaic River Study Area, dated August 26, 2013

Dear Dr. Law:

The U.S. Environmental Protection Agency (EPA) has reviewed the *Draft 2012 Benthic Invertebrate Community Reference Data Report for the Lower Passaic River Study Area* ("Data Report"), dated August 26, 2013, prepared by Windward Environmental LLC on behalf of the Cooperating Parties Group (CPG).

EPA is providing the enclosed comments on the CPG's revised Data Report with this letter in accordance with Section X, Paragraph 44(d) of the Agreement. Please proceed with revisions to the Data Report within 30 days consistent with the enclosed comments. If there are any questions or clarifications needed, please contact me to discuss.

Sincerely,

Diane Salkie, Remedial Project Manager Lower Passaic River Study Area RI/FS

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Cc: Zizila, F. (EPA)

Sivak, M. (EPA) Hyatt, B. (CPG) Otto, W. (CPG)

No.	Section	Comment
1	General Comment	Throughout the document, there appears to be confusion between the definition of background and reference locations since each term is interchanged with one another and in some instances, are both used in the same sentence (e.g., first sentence of second paragraph of Section 1.1). It is the impression of the reviewer that the purpose of this investigation was to characterize benthic communities representative of background conditions, not reference. It is recommended that any mention of reference be revised to read background. This includes the title of the report and Figure 2-1.
		If both terms are used, the document should clearly define/distinguish what is to be considered background and reference locations. EPA recommends referring the background to local background or similar, the locations should be similar to site conditions, without site-specific chemical releases. A true reference location should be characterized as having no potentially hazardous chemical releases, site-related or not. In other words, as pristine as possible, which based on past discussion with CPG may be difficult given the study area.
2	Page 3 Section 2.1, first paragraph, last sentence	The text states that "six sampling locations were selected in each segment" of RM sampled for SQT. Review of Figure 2-1 depicts four locations within Segment 4, and eight locations in Segment 3. Please revise text as appropriate.
3	Page 7, Section 2.1, last paragraph	Please change USEPA representative to "USEPA oversight personnel" or similar. In addition, oversight staff did not approve the selection of final sampling locations as the text suggests. All final selections were made by EPA. Please revise text.
4	Page 10, Section 2.3.1, second paragraph, second sentence	Text states that benthos samples were "processed in order". The text is unclear as to what type of "order" is being conveyed, i.e. order in which the samples were collected? Please clarify.
5	Page 13, Section 2.4.4 and footnote 4	The footnote states that NYDEC tolerance values will be used to calculate HBI metrics. On page 15 of the document, HBI results presented in Table 3-2 and in the second paragraph of that page consist of values presented in Appendix I in the column titled "Hilsenhoff Biotic Index (EcoAnalysts)", and not from the column titled "Hilsenhoff Biotic Index (NYDEC)". Assuming the HBI NYDEC column in Appendix I presents results derived using NYDEC tolerance values, why aren't these included in Table 3-2 and the above-mentioned text? Please clarify and if needed revise as appropriate.
6	Page 15, First paragraph, second sentence	For consistency between Table 3-2 and discussion of other BMI community metrics, please revise the text for SDI mean and maximum values to two decimal places.
7	Page 17, two bullets following the first paragraph	Two samples, UPRT19L-BC03 and UPRT20C-BC01 are mentioned in which taxonomists made changes during QA checks of the initial benthos identification. These two samples are not included in the taxonomy lab narrative provided in Appendix G.